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REMARKS

1. Claims 24-28, 31-37, and 39 are pending in the present application. Claims 1-23, 29, 30, and 38 are cancelled. Claims 24-28, 31-37, and 39 have been rejected by the Examiner. Through this amendment, claims 24, 25, 27, 31, and 36 have been amended; claims 1-23, 29, 30, and 38 are cancelled; and claims 40-42 are new. The amended claims and amended abstract, together with these remarks, respond to the Office Action dated November 16, 2005. After entry of this amendment, claims 24-28, 31-37, and 39-42 will remain. The amended claims are fully supported by the specification and claims as originally filed, do not include new matter, and are in more readable form. Reconsideration of the present application is requested.

2. Claims 24-28, 31-37, and 39 are rejected under the doctrine of obvious-type double patenting over claims 1-19 of US 6,672,860 (Bachinski, et al.). If claims are allowed, Applicants will timely submit a suitable terminal disclaimer.

3. Claims 24, 25, 27, 31-34, and 36 have been rejected by the Examiner under 35 U.S.C. 103(a) as unpatentable over McCarthy, et al. (IE 80484B3) in view of Ellis (3,851,242), Philipp (6,466,036), or Denen (6,838,887). The Examiner cites McCarthy as teaching a proximity warning device for a fireplace but silent as to the use of a capacitance module and cites Ellis, Philipp, and Denen as teaching the measurement of capacitance in a proximity detector.

Even if McCarthy is combined with Ellis, Philipp, or Denen, they still do not recite or suggest all of the elements of the Applicants' amended claims. The Examiner states that "Ellis, Philipp, and Denen all teach measuring capacitance in a proximity detector" In contrast, Applicants claim a proximity warning system comprising an output element whose output is a function of an amount of a difference between a signal produced by a sensor and a signal from an adjustable reference element pre-adjusted to represent the absence of the object, which is clearly not disclosed, suggested, or claimed by McCarthy in view of Ellis, Philipp, or Denen, and is clearly not obvious from McCarthy in view of Ellis, Philipp, or Denen.

Ellis' proximity detection is based on frequency shift (col.3, lines 47-50; col. 8, lines 45-56) in a resonant LC circuit, where the sensor is a coil, not a capacitor (col.4, lines 29-36; 56-65;

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claims 1, 3). The only purpose of Ellis' capacitor is to form a resonant LC circuit (col.4, lines 26-55); it does no sensing. Ellis does not use, disclose, claim or suggest an output element whose output is a function of an amount of a difference between a signal produced by the sensor and a signal from an adjustable reference element pre-adjusted to represent the absence of the object.

Philipp uses at least 3 switching elements, sampling and sensing capacitors or sensing plates, and two voltages in a complicated switching scheme to charge, transfer charge, discharge the capacitors (col. 4 line 7 – col. 5, line 58; col.6, lines 25-32; col. 7, lines 45-49; claims 1, 9, 13, 19). Philipp does not use, disclose, claim or suggest an output element whose output is a function of an amount of a difference between a signal produced by the sensor and a signal from